THEATER MEDICAL INFORMATION PROGRAM (TMIP)



ASD(HA) ACAT IAM Program

Prime Contractor

Total Number of Systems: TBD
Total Program Cost (TY\$): \$123M
Average Unit Cost (TY\$): TBD
Full-rate production: 4QFY01

Southwest Research Institute (SwRI)

SYSTEM DESCRIPTION & CONTRIBUTION TO JOINT VISION 2020

The Theater Medical Information Program (TMIP) is a tri-Service system that will provide information to deployed medical forces to support all medical functional areas, including command and control, medical logistics, blood management, patient regulation and evacuation, medical threat/intelligence, health care delivery, manpower and training, and medical capability assessment and sustainment analysis. TMIP will perform this service by integrating information from other medical systems, including the Composite Health Care System (CHCS), CHCS II, Defense Blood Standard System, Defense Medical Logistics Standard Support, and TRANSCOM Regulating and Command and Control Evacuation System. TMIP will also integrate other medical applications that have been developed for use during deployment.

TMIP will provide an integrated medical information system to support theater operations by linking all echelons of medical care in support of time-sensitive decisions critical to the success of theater

operations. This information will be made available to theater commanders through integration with the Global Command and Control System and Global Combat Support System. In addition, TMIP will support the integration of medical capabilities under a joint concept of operations to assist the medical commander/theater surgeon and support the delivery of seamless combat medical care. TMIP supports the *Joint Vision 2020* concept of *focused logistics* by integrating medical systems at the theater level to support deployed forces, enhancing the Services' capability to collect, process, and disseminate an uninterrupted flow of information, allowing more efficient protection of lives and resources.

BACKGROUND INFORMATION

Although most health functional areas are well supported by automated information systems within the Military Health System, the Theater Health Services are under supported. To further complicate the matter, there is insufficient interoperability between the existing systems to enable seamless information exchange. The TMIP Mission Need Statement (MNS), which was revalidated in November 1996, documented the needs of the theater CINCs, joint task force commanders, and their medical support activities for data to make informed and timely decisions. Specific deficiencies identified in the MNS include: (1) inadequate command and control systems; (2) insufficient interoperability; (3) limited electronic data collection; and (4) inadequate communications support.

TMIP will be developed incrementally in "blocks" and "builds" of increasing functionality and integration. The military Services are expected to fund their own infrastructure (networks and communications) and computer hardware to host the TMIP software in the theater environment. The program was awarded Milestone I in June 1998. Some of the potential TMIP capabilities were demonstrated at Ft. Gordon, GA, in July 1999, in conjunction with joint exercises GRECIAN FIREBOLT and GOLDEN MEDIC 99. However, the contractor did not deliver the first "build" of the product on schedule in spring 2000, which has delayed operational testing and fielding by about a year. Apparently, the program is now being re-baselined.

TEST & EVALUATION ACTIVITY

No OT&E has been conducted on TMIP. The Joint Requirements Oversight Council approved a Capstone Requirements Document in January 1999 and the Operational Requirements Document for TMIP Block 1 in October 1999. A Capstone TEMP, along with an annex that specifically addresses TMIP Block 1, had been staffed and was ready for OSD approval. IOT&E, to be conducted by the Army Test and Evaluation Command (ATEC), the lead independent OTA, was to have been performed on each of three Block 1 "builds." Build 1.0, to be used initially by the Army, was originally scheduled for a Limited User Test (LUT) in February 2000. Build 1.1, to be used initially by the Navy, was originally scheduled for a LUT in June 2000. Build 1.2, the final and first fully joint version of TMIP Block 1, was originally scheduled for OT&E in October 2000. The latest planning is reportedly for a single pre-IOC version (to be called "TMIP Lite") that will undergo a LUT in February-March 2001. OT&E on the final Block 1 version will not occur until summer or fall 2001.

TEST & EVALUATION ASSESSMENT

TMIP must integrate several existing and developmental systems into a single system that can be easily used by theater commanders and medical personnel in combat environments. Its heavy dependence on the successful operation of the other systems presents additional technical challenges. The functional and operational testing of each TMIP application is supposed to be accomplished prior to delivery to the TMIP PM for integration. This can impose a scheduling problem for TMIP, since a delay in or problem with any application can impact the delivery of that TMIP block. For this reason, the TMIP PM is developing some applications on his own (e.g., medical encounters, immunization tracking) because shared versions from CHCS II are not yet ready. Furthermore, programmatic and OT responsibilities for a "smart card" (called the Personal Information Carrier), have not been completely resolved.

For connectivity, TMIP will depend on existing (but limited) tactical communications systems that will be heavily stressed with fragmented responsibilities. (For example, the transfer of data to the TMIP Interim Theater Data Base is being addressed by the TMIP PM, but not the transfer of data between health care echelons). While some of these situations may be unavoidable, they complicate both operational testing and operational planning and execution. DOT&E is working with the medical functional community, ATEC, and TMIP PM to address all of these issues so that a comprehensive T&E plan can be developed, but this activity has been impacted by the re-baselining of the system. It will be challenging to ensure that the testing environment mirrors the expected theater operational conditions.